

SMIRNOV, L. D.; DYUMAYEV, K. M.; SHUYKIN, N. I.; BEL'SKIY, I. F.

Synthesis of 2,4,6-trialkyl-3-hydroxypyridines. Izv. AN SSSR  
Otd. khim. nauk no.12:2246-2247 D '62. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR  
i Institut khimicheskoy fiziki AN SSSR.

(Pyridine)

SHUYKIN, N.I.; NARYSHKINA, T.I.; RASHCHUPKINA, Z.A.

Catalytic dehydrocyclization of 2,4-dimethyl-1,3-pentadiene and  
1,3-heptadiene. Neftekhimia 2 no.1:44-47 Ja-F '62. (MIRA 15:5)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo.  
(Pentadiene) (Aromatization) (Heptadiene)

S/204/62/002/004/004/019  
E071/E433

AUTHORS: Shuykin, N.I., Timofeyeva, Ye.A., Plotnikov, Yu.N.  
Dobrynina, T.P., Petryayeva, G.S., Smirnov, V.S.

TITLE: The production of alkenes of a composition C<sub>6</sub>-C<sub>10</sub>  
by catalytic dehydrogenation of alkanes

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 457-465

TEXT: The reaction of dehydrogenation of alkanes (C<sub>6</sub>-C<sub>10</sub>) was investigated in order to find appropriate catalysts and conditions for selective production of the corresponding alkenes, as well as to study the possibility of controlling reactions of dehydrogenation, dehydrocyclization and cracking. The present paper is a generalization of the authors' researches on these problems. It was shown on examples of 2-methylpentane, 3-methylpentane and 2,3-dimethylbutane that alkanes C<sub>6</sub>, the long chain of which contains less than 6 carbon atoms, are comparatively easily dehydrogenized on an alumochromopotassium catalyst at 500°C and a volume velocity of 0.5 h<sup>-1</sup>, yielding from 86 to 89% of catalyst containing from 32 to 40% of alkenes. Conditions for dehydrogenation of 2,2-dimethylbutane were found under which

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The production of alkenes ...

96.5% yield of catalysts, containing 10.4% of 3,3-dimethylbutene-1 (practically equilibrium yield) and 4.6% of cracking products were obtained (no details given). Some catalysts and process conditions for selective dehydrogenation of n-hydrocarbons C<sub>6</sub>-C<sub>10</sub> were found under which about 10% yields of corresponding alkenes were obtained. The possibility of selective dehydrogenation of n-alkenes (C<sub>6</sub>-C<sub>10</sub>) into alkenes was indicated by comparison of results obtained with various catalysts which pointed out the existence of two kinds of active centres on alumochromium catalysts - dehydrogenating and dehydrocyclizing. The activity of dehydrocyclizing centres can be considerably lowered by a treatment of the catalyst with cyclopentadiene or furfurole with subsequent regeneration. The possibility of controlling dehydrogenation, dehydrocyclization and cracking reactions by carrying out the process in a fluidized bed of an appropriate catalyst was demonstrated, e.g. on dehydrogenation of n-nonane over Al<sub>2</sub>O<sub>3</sub> + Cr<sub>2</sub>O<sub>3</sub> catalyst at 500°C selective hydrogenation; at 600°C dehydrogenation and dehydrocyclization with K-5 catalyst at 600°C - dehydrogenation and cracking with Al<sub>2</sub>O<sub>3</sub> + Cr<sub>2</sub>O<sub>3</sub> + K<sub>2</sub>O catalyst at 600°C - dehydrogenation with

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SHUYKIN, N. I.; NARYSHKINA, T. I.

Catalytic dehydrogenation of petroleum methylcyclopentane.  
Neftekhimia 2 no.4:473-479 Jl-Ag '62. (MIRA 15:10)

1. Institut organicheskoy khimii AN SSSR imeni N. D. Zelinskogo.

(Cyclopentane) (Dehydrogenation)

SHUYKIN, N.I.; ERIVANSKAYA, L.A.; YAN AY-SI [Yang Ai-hsi]

Catalytic dehydrocyclization of  $\alpha$ -alkylnaphthalenes. Zhur.ob.-  
khim. 32 no.3:823-827 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Naphthalene) (Aromatization)

BEL'SKIY, I.F.; SHUYKIN, N.I.; SHOSTAKOVSKIY, V.M.; KHAR'KOV, S.N.

New method of synthesizing esters of  $\gamma$ -ketocarboxylic acids.  
Part 1: Catalytic transformation of esters of  $\beta$ -furylacrylic acids  
to esters of  $\gamma$ -ketoanthic acids. Zhur.ob.khim. 32 no.4:1030-  
1034 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR.  
(Furanacrylic acid) (Heptanoic acid)

SHUYKIN, N.I.; BEL'SKIY, I.F.; VASILEVSKAYA, G.K.

Hydrogenation of 2-methyl-5-acetyl furan on catalysts containing metals of the VIII<sup>t</sup> group. Zhur. ob. khim. 32 no. 9:2911-2914 S '62. (MIRA 15:9)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR. (Furan) (Hydrogenation) (Catalysts)

SHUYKIN, N.I.; KONONOV, N.F.; KASHKOVSKAYA, L.K.; AKIMOV, V.M.

Catalytic hydrodealkylation of polyalkyl benzene.  
Part 3: Demethylation of toluene on nickel-alumina  
catalysts. Effect of nickel concentration. Zhur.ob.khim.  
32 no.11:3595-3599 N '62. (MIRA 15:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo  
AN SSSR.

(Toluene) (Methyl group)  
(Nickel catalysts)

11636

S/080/62/035/009/010/014  
D204/D307

11636

AUTHORS: Dorogochinskiy, A.Z., Viktorova, Ye.A., Shuykin, N.I.,  
Boykova, Ye.P., and Malin, A.G.

TITLE: The effect of cycloalkenyl phenols on the stability  
of a fuel containing unsaturated hydrocarbons

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 9, 1962,  
2060 - 2064

TEXT: The stabilizing effects of: A) 3-methyl-4-(cyclopenten-2-yl);  
B) 3-methyl-6-(cyclopenten-2-yl); C) 4-methyl-2-(cyclopenten-2-yl);  
D) 2-(cyclohexen-2-yl); and E) 4-(cyclohexen-2-yl)-phenols were in-  
vestigated, on a fuel containing ~15 % of unsaturated hydrocarbons,  
over a period of 5 months, at  $50 \pm 0.5^{\circ}\text{C}$ . Five samples of fuel were  
tested with the above additives (50 mg per 100 ml fuel), two addi-  
tional samples were respectively treated with 10 g/100 ml of p-hydro-  
xydiphenylamine and 50 mg/100 ml of inhibitor ф4-16 (FCh-16), and  
one sample was kept as a blank. Each sample also contained steel  
wire (with a surface area of  $20 \text{ cm}^2$  per liter of fuel) and was open  
to air via a capillary. Every month the samples were tested for tar

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X

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D204/D307

The effect of cycloalkenyl ...

content and stability to heat (1 hour at 150°C). It was found that B and C inhibited tar formation, similarly to antioxidants p-hydroxydiphenylamine and FCh-16. The formation of sediments at 150°C was impeded by B and D. The additive B thus exhibits a twofold action. There are 3 tables.

SUBMITTED: May 30, 1961

X

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SHUYKIN, N.I.; BEL'SKIY, I.F.; KARAKHANOV, R.A.

Catalytic dehydrogenation of dihydrofurans. Synthesis of  
2,4-dialkyl furans. Dokl. AN SSSR 147 no.1:119-122 N '62.  
(MIRA 15:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo  
AN SSSR. 2. Chlen-korrespondent AN SSSR (for Shuykin).  
(Furan)  
(Dehydrogenation)

SHUYKIN, N. I.

SHUYKIN, N. O. [Possibly N. I.]

"Catalytic polycyclisation of higher alkanes"

report to be submitted for the 6th World Petroleum Congress,  
Frankfurt am Main, W. Germany, 19-26 Jun 63.

NEKRASOVA, V. A.; SHUYKIN, N. I.

Separation of urea complexes with n-alkanes. Izv. AN SSSR.  
Otd. khim. nauk no.1:186-187 '63. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Urea) (Paraffins)

S/062/63/000/003/009/018  
B101/B186

## AUTHORS:

Shuykin, N. I., Petrov, A. D., Glukhovtsev, V. G., and  
Karakhanov, R. A.

## TITLE:

Transformations of the 1-methyl-2- $\alpha$ -furyl cyclopropane and  
1-cyclopropyl-2- $\alpha$ -furyl cyclopropane on catalytic hydrogena-  
tion

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh  
nauk, no. 3, 1963, 521 - 524

TEXT: Hydrogenation of the 1-methyl-2- $\alpha$ -furyl cyclopropane gave rise to  
2-n-butyl and that of the 1-cyclopropyl-2- $\alpha$ -furyl cyclopropane with a  
palladium-carbon catalyst (15 % Pd) at 300°C produced 2-n-hexyltetrahydro-  
furan, with a yield of about 95 %. The hydrogenation of the furan rings  
proceeds in these bicyclic or tricyclic systems just as easily as with the  
simplest alkyl derivatives of the furan. The cyclopropane ring is broken  
open by the addition of hydrogen. The ring cleavage takes place between  
the tertiary C atoms. Synthesis of the 1-methyl-2- $\alpha$ -furyl-cyclopropane,  
b.p. 143.5°C/759 mm Hg,  $n_D^{20}$  = 1.4735,  $d_4^{20}$  = 0.9499, by distillation of  
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Transformations of the ...

S/062/63/000/003/009/018  
B101/B186

the 3-methyl-5- $\alpha$ -furyl pyrazolin in the presence of dry KOH is suggested.  
The yield is 90 %.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii  
nauk SSSR (Institute of Organic Chemistry imeni N. D.  
Zelinskogo of the Academy of Sciences USSR)

SUBMITTED: June 4, 1962

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S/191/63/000/004/003/015  
B101/B186

AUTHORS: Parbuzina, I. L., Sokolov, N. N., Shuykin, N. I.,  
Naryshkina, T. I.

TITLE: Methyl-3,6 endomethylene-1,2,3,6-tetrahydrophthalic anhydride  
used as a curing agent for epoxy resins

PERIODICAL: Plasticheskiye massy, no. 4, 1963, 12 - 13

TEXT: Methyl-3,6-endomethylene-1,2,3,6-tetrahydrophthalic anhydride (META) was synthesized from methyl cyclopentadiene obtained by dehydrogenation of methyl cyclopentene at 600°C with an alumina chromium - potassium catalyst. Small portions of maleic anhydride had been added to this catalyst containing 58% methyl cyclopentadiene, at - 5°C. It was then kept at 50°C for 40 min. The raw product, an oily liquid at room temperature contained 7.2% free maleic anhydride. Attempted purification failed since decomposition set in on distillation in vacuo, maleic anhydride being liberated. The effect of META as a curing agent was tested by means of E4-6 (ED-6) epoxy resin. 100 parts by weight of ED-6 was mixed with 70 parts by weight of META, cured at 150°, and then kept at 180°C for 6 hrs. The cured resin

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B101/B186

Methyl-3,6...

had an impact strength of  $108 \text{ kg} \cdot \text{cm}/\text{cm}^2$  and a Martens heat resistance of  $100^\circ\text{C}$ . Its loss in weight when kept at  $200 - 250^\circ\text{C}$  for 2 - 10 days was 0.29 - 5.06%. As compared with phthalic or maleic anhydrides used as curing agents, META reduces the glass transition point  $T_g$  by  $30 - 40^\circ\text{C}$  to  $\sim 70^\circ\text{C}$ ; the softening point of the resin was  $300^\circ\text{C}$ . Except for a reduction of  $T_g$ , Martens heat resistance, and volume resistivity ( $2.6 \cdot 10^{15} \text{ ohm} \cdot \text{cm}$ ), the physicomechanical and dielectric properties of resin cured with META were the same as those of resins cured with other aldehydes. The great advantage of META is that it is unpoisenous, that it mixes easily with the epoxy resin at  $20 - 30^\circ\text{C}$ , and that the mixture remains unchanged for many weeks at  $70^\circ\text{C}$ . There are 1 figure and 2 tables. The most important English-language references are: M. M. Lee, R. D. Hodges, Plast. Technol., 6, no. 4, 43 - 48, 50 - 53 (1960); B. H. Muller, C. A. Harper, Electr. Manufact., 65, no. 2, 119 (1960).

Card 2/2

*Shukin, I. F.*  
BEL'SKIY, I.F.; SHYUKIN, N.I.

New method of synthesizing 2,4,5,-trialkylfurans. Izv. AN SSSR. Otd.  
khim. nauk no.4:723-726 Ap '63. (MIRA 16:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Furan)

VIKTOROVA, Ye.A.; SHUYKIN, N.I.; POPOVA, S.Ye.

Alkylation of phenols by bifunctional compounds. Report No.8:  
Catalytic alkylation of m- and p-cresols by 1,3-propanediols.  
Izv. AN SSSR. Ser.khim. no.7:1277-1280 Jl '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Cresol) (Propanediol)

VIKTOROVA, Ye.A.; SHUYKIN, N.I.; KARAKHANOV, E.A.;

Alkylation of phenols by bifunctional compounds. Report No.9: Alkylation of m- and p-cresols by conjugated diene hydrocarbons in the presence of ethylsulfuric acid. Izv. AN SSSR. Ser.khim. no.7:1281-1284 Jl '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Cresol) (Alkylation) (Hydrocarbons)

SHUYKIN, N.I.; YAN AY-SI [Yang Ai-hsi]; ERIVANSKAYA, L.A.

Dehydrocyclization of 2-amyl naphthalenes in the presence of alumina-chromia catalysts and platinized carbon. Izv. AN SSSR. Ser.khim. no.7: 1284-1289 Jl '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Naphthalene) (Aromatization) (Catalysts)

SHUYKIN, N.I.; ERIVANSKAYA, L.A.; YAN AY-SI [Yang Ai-hsi]; ROMANOVA, L.P.

Catalytic dehydrocyclization of 2-n-oxylnaphthalene. Izv. AN  
SSSR. Ser. khim. no.8:1469-1474 Ag '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.  
(Naphthalene) (Cyclization)

SHUYKIN, N.I.; BEL'SKIY, I.F.; VASILEVSKAYA, G.K.; SHOSTAKOVSKIY, V.M.

Hydrogenation of 2-methyl-5-acetyl furan in the liquid phase.  
Izv.AN SSSR.Ser.khim. no.8:1475-1478 Ag '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Ketone) (Hydrogenation)

SHUYKIN, N.I.; AN, V.V.

Catalytic cleavage of organic oxides. Izv.AN SSSR.Ser.khim.  
no.8:1478-1483 Ag '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Oxides) (Cracking process)  
(Catalysis)

BEL'SKIY, I.F.; SHUYKIN, N.I.; SHOSTAKOVSKIY, V.M.

Catalytic hydrogenation of furan and aliphatic hydroxy compounds  
by the flow method under elevated hydrogen pressure. Izv. AN SSSR.  
Ser.khim. no.9:1631-1635 S '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Furanacrylic acid) (Hydrogenation) (Alcohols)

BEL'SKIY, I.F.; SHUYKIN, N.I.; SKOBTSOVA, G.Ye.

Conjugated hydrogenolysis in the synthesis of pyrrolidine homologs.  
Izv. AN SSSR. Ser.khim. no.9:1675-1678 S '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Hydrogenation) (Pyrrolidine)

SHUYKIN, N.I.; BEL'SKIY, I.F.; SKOBTSOVA, G.Ye.

Catalytic synthesis of higher pyrrole and pyrrolidine homologs  
from  $\alpha$ -furylalkylamines. Izv. AN SSSR. Ser.khim. no.9:  
1678-1680 S '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Furanamine) (Pyrrole) (Pyrrolidine)

AKIMOV, V.M.; SHUYKIN, N.I.; KASHKOVSKAYA, L.K.; KONONOV, N.F.

Phase transitions in the process of regeneration of the nickel-magnesium-aluminum oxide spinel catalyst. Izv. AN SSSR Ser.khim. no.10:1862-1863 O '63. (MIRA 173)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.

Catalytic alkylation of tetralin. Report No.9: Alkylation of  
tetralin by alkene fractions of paraffin cracking. Izv. AN  
SSSR. Ser. khim. no.11:2011-2014 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

VIKTOROVA, Ye.A.; SHUYKIN, N.I.; KARAKHANOV, E.A.

Catalytic alkylation of p-cresols with dipropenyl. Izv. AN  
SSSR. Ser. khim. no.12:2226-2227 D '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.

SHUYKIN, N.I.; TULUPOVA, Ye.D.; OSTAPENKO, E.G.

Catalytic conversions of chlorocyclohexane. Neftekhimiia  
3 no.1:60-65 Ja-F '63. (MIRA 16:2)

1. Institut organicheskoy khimii AN SSSR imeni Zelinskogo.  
(Cyclohexane) (Catalysis)

SHUYKIN, N.I.; TULUPOVA, Ye.D.; OSTAPENKO, E.G.

Catalytic conversions of methylchlorocyclohexanes. Neftekhimiia  
3 no.2:201-205 Mr-Ap '63. (MIRA 16:5)

1. Institut organicheskoy khimii AN SSSR imeni N.D.Zelinskogo.  
(Cyclohexane) (Catalysis)

SHUYKIN, N.I.; TULUPOVA, Ye.D.; OSTAPENKO, E.G.

Separation of methylcyclopentadiene from the products of  
catalytic dehydrogenation of methylcyclopentene. Neftekhimiia  
3 no.4:494-497 Jl-Ag '63. (MIRA 16:11)

1. Institut organicheskoy khimii AN SSSR imeni N.D.  
Zelinskogo.

SINYKIN, N.I.; NARYSHKINA, T.I.; RASHCHUPKINA, Z.A.; AVERINA, Ye.Ye.

Catalytic dehydrogenation of methylcyclopentene. Neftekhimika  
3 no.6:859-863 N-D '63. (MIRA 17:3)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo.

SHUYKIN, N.I.; BARTOK, M.; KARAKHANOV, R.A.; SHCHOSTAKOVSKIY, V.M.

Investigation of the chemical transformations of diols and  
organic oxides. Pt. 7. Acta phys chem Szeged 9 no. 3/4:124-130  
'63.

1. Institut organicheskoy khimii im.N.D.Zelinskogo Akademii  
nauk SSSR, Moscow (for Shuykin,Karakhanov and Shchostakovskiy).  
2. Katedra organicheskoy khimii universiteta im.Yozsef Attila,  
Szeged (for Bartok).

BEL'SKIY, I.F.; SHUYKIN, N.I.

Catalytic hydrogenation and hydrogenolysis of furan compounds.  
Us.p khim. 32 no.6;707-736 Je '63. (MIRA 16:8)

1. Institut organicheskoy khimii AN SSSR imeni N.D. Zelinskogo.  
(Furan) (Hydrogenation)

SHUYKIN, N.I.; KONONOV, N.F.; KASHKOVSKAYA, L.K.; AKIMOV, V.M.

Catalytic hydrodealkylation of polyalkyl benzenes. Part 4: De-methylation of toluene on catalysts of the Ni - MgO • Al<sub>2</sub>O<sub>3</sub> composition. Zhur. ob. khim. 33 no.12:3871-3875 D '63. (MIRA 17:3)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

SHUIKIN, N.I. [Shuykin, N.I.]; KOVACS, Odon, dr.; BELSKII, I.F. [Belskiy, I.F.]  
BARTOK, Mihaly.

Catalytic and thermic conversions of cyclic ethers. Acta chimica  
Hung 38 no.2:115-121 '63.

1. Institute of Organic Chemistry N.D. Zelinskii of the Academy  
of Sciences of the USSR, Moscow (for Shuykin and Belskiy).
2. Institute of Organic Chemistry, University of Szeged, Szeged,  
Beloianisz ter 8 (for Kovacs and Bartok).

SHUYKIN, N.I.; BEL'SKIY, I.F.; SHOSTAKOVSKIY, V.M.; KARAKHANOV, R.A.

Synthesis of tetrahydrofuran ketones and their isomerization to  
 $\gamma$ -diketones. Dokl. AN SSSR 151 no.6:1350-1351 Ag '63.  
(MIRA 16:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

BEL'SKIY, I.F.; SHUYKIN, N.I.; SHOSTAKOVSKIY, V.M.

Catalytic synthesis of  $\gamma$ -ketocarboxylic esters by the method  
of conjugate hydrogenolysis. Dokl. AN SSSR 152 no.4:862-  
864 O '63. (MIRA 16:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

SHUYKIN, N.I.; BEL'SKIY, I.F.; SHOSTAKOVSKIY, V.M.; KHAR'KOV, S.N.;  
GAYVORONSKAYA, G.K.

Conversion of  $\alpha$ -ketocarboxylic acid esters to lactams.  
Dokl. AN SSSR 153 no.3:628-630 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

SHUYKIN, N. I.; TIMOFEYeva, Ye. A.; SMIRNOV, V. S.

"Study on catalytic dehydrogenation of C<sub>6</sub>-C<sub>10</sub>-alkanes."

Report submitted to 3rd Intl Cong on Catalysis, Amsterdam, 20-25 Jul 64.

Inst of Organic Chemistry im Zelinskiy, AS USSR, Moscow.

BEL'SKIY, I.F.; SHUYKIN, N.I.; KARAKHANOV, R.A.

Synthesis of  $\gamma$ -ketols and dihydrofurans based on 1-furyl-3-al-  
kanols. Izv. AN SSSR. Ser. khim. №.2:326-331 F '64. (MIRA 17:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

BEL'SKIY, I.F.; SHUYKIN, N.I.; VOL'NOVA, Z.K.

Synthesis and isomerization of 2,2-dialkyl-5-propyltetrahydro-furans. Izv.AN SSSR.Ser.khim. no.2:369-371 F '64. (MIRA 17:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.

Catalytic alkylation of tetraline. Report No.10: Possibility of using the dehydrogenation catalysts of n-nonane for the alkylation of tetraline. Izv. AN SSSR. Ser.khim. no.3:530-534 Mr '64.  
(MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; ERIVANSKAYA, L.A.

Catalytic synthesis of isomeric dimethylcyclohexanes on a base  
of cresols. Neftekhimia 4 no.3:431-434 My-Je '64. (MIRA 18:2)  
1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.

SHUYKIN, N.I.; BEL'SKIY, I.F.; SAVEKINA, O.N.

Catalytic reduction of furan carbonyl- and hydroxyl-containing  
compounds. Izv. AN SSSR. Ser.khim. no.3:534-537 Mr '64.  
(MIRA 17:4)  
1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; VASILEVSKAYA, G.K.

Hydrogenation of 2,6-heptanedione on platinized carbon. Izv. AN  
SSSR. Ser.khim. no.3:557-558 Mr '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

TULUPOVA, Ye.D.; SHUYKIN, N.I.; OSTAPENKO, E.G.

Catalytic synthesis of cyclohezadiene-1,3 and methylcyclopenta-diene. Neftekhimiia 4 no.1:6-10 Ja-F'64 (MIRA 17:6)

1. Institut organicheskoy khimii AN SSSR imeni N.D.Zelinskogo.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

PLOTNIKOV, Yu.N.; TIMOFEEVA, Ye.A.; SHUYKIN, N.I.

Conversions of n.-hexane on an aluminum-chromium-potassium catalyst  
under reduced pressure. Neftekhimiia 4 no.2:225-228 Mr-Ap'64  
(MIRA 17:8)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

ACCESSION NR: AP4044552

S/0204/64/004/004/0530/0534

AUTHOR: Erivanskaya, L. A., Khofman, Kh., Shuykin, N. I.

TITLE: Catalytic synthesis of dimethylcyclopentadienes

SOURCE: Neftekhimiya, v. 4, no. 4, 1964, 530-534

TOPIC TAGS: dimethylcyclopentadiene, dimethylcyclopentene, aluminomolybdenum catalyst, hydrocarbon, dehydrogenation, toluene, diene synthesis, catalytic dehydrogenation

ABSTRACT: Dimethylcyclopentadienes were produced by the catalytic dehydrogenation of 1, 2<sup>l</sup> and 2, 4-dimethylcyclopentene-1, as well as mixtures of isomeric dimethylcyclopentenes (b.p. 91.5-92, 92-94 and 80-105C), on a flow-type apparatus at 20-30 mm Hg, 600C and a flow rate of 1.0 hr<sup>-1</sup> in the presence of various catalysts, such as Cr<sub>2</sub>O<sub>3</sub>-K<sub>2</sub>O-Al<sub>2</sub>O<sub>3</sub> and MoO<sub>3</sub>. Samples were taken after 30 and 60 minutes, separately, and analyzed for cyclopentadiene content. The yield of dimethylcyclopentadienes was 20-30% on the basis of the initial hydrocarbon or mixture, and about 60-70% on the basis of the converted product. The lowest yield was found for dimethylcyclopentenes boiling a 80-105C due to the presence of some methylcyclohexenes and dimethylcyclopentanes. It was established that, during dehydrogenation, there is some displacement of the double bond in the dimethylcyclopentenes toward the formation of the more stable 1,2-dimethylcyclopentene<sup>1</sup> and a rearrangement of the

Card 1/2

ACCESSION NR: AP4044552

methyl groups leading to the formation of this same isomer. Dimethylcyclopentenes isolated from the dehydrogenation products can be subjected to repeated dehydrogenation to dimethylcyclopentadienes. To produce dimethylcyclopentadienes, a mixture of isomeric dimethylcyclopentenes can therefore be used without preliminary separation into narrow fractions. The synthesis and dehydrogenation of 1,2-dimethylcyclopentene-1 and 2,4-dimethylcyclopentene-1 are described. Experimental data are given for several different dehydrogenated fractions. Orig. art. has: 1 table and 2 chemical equations.

ASSOCIATION: Khimicheskiy fakul'tet, Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Department of Chemistry, Moscow State University)

SUB CODE: OC

SUBMITTED: 16Oct63

NO REF SOV: 008

OTHER: 000

Card 2/2

SI UYKIN, N. I.; AF'OK, Y.; BARTOK, M.; BEL'SKIY, I. F.; KARAKHANOV,  
R. A.

Synthesis and isomerization of 2-n-propyl-5-phenyl furan.  
Izv AN SSSR Ser Khim no. 4:746-747 Ap '64. (MIRA 17:5)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

SIUYKIN, N. I.; BEL'SKIY, I. P.; KARAKHANOV, R. A.; KOVMA, B.; BARTOK,  
M.

Isomerization of tetrahydropyrans. Izv AN SSSR Ser Khim  
(MIRA 17:5)  
no. 4:747-750 Ap '64.

1. Institut organicheskoy khimii im. N. D. Zelinskogo  
AN SSSR.

SHUYKIN, N. I.; BEL'SKIY, I. F.; KARAKHANOV, R. A.; NAZARYAN, A. A.

Synthesis of -diketones by conjugated hydrogenolysis. Izv  
AN SSSR Ser Khim no. 4:750-751 Ap '65. (MIRA 175)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN  
SSSR.

BEL'SKIY, I.F.; SHUYKIN, N.I.; SKOBTSOVA, G.Ye.

Catalytic transformation of furanamines to 2,4-dialkyl pyrroles.  
Izv. AN SSSR. Ser. khim. no.6:1118-1120 Je '64.

Synthesis of 2,5-dialkylpyrrolidines by conjugated catalytic  
hydrogenolysis of furanamines. Ibid.:1120-1123  
(MIRA 17:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

SHUYKIN, N.I.; BEL'SKIY, I.F.; VOL'NOVA, Z.K.

Synthesis of trialkyltetrahydrofurans by the method of catalytic  
isomerization of  $\gamma$ -tetrahydrofurylalkanols. Izv. AN SSSR. Ser.  
khim. no.6:1128-1130 Je '64.

(MIRA 17:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

L 43008-65 ENT(m)/EPF(c)/EPF(j)/T/EPF(t)/EPF(b) Fe-4/Pr-4 IJP(c) JD/RM  
ACCESSION NR: AT5008625 S/2933/64/007/000/0058/0060 28  
27

AUTHORS: Shuykin, N. I.; Bel'skiy, I. F.; Barkovskaya, L. Ya.; Gerasimov, N. M. 27  
21

TITLE: Synthesis of some cyclic sulfides 21

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya seraorganicheskikh soyedineniy,  
soderzhashchikhsya v neftyakh i nefteproduktakh, v. 7, 1964, 58-60

TOPIC TAGS: sulfide, cyclic group, cyclization, thiophane, organosulfur, furane,  
sodium sulfide, cyclic sulfide

ABSTRACT: A method for synthesizing 2,3,5-trialkylthiophanes was developed to produce them in quantities sufficient for experimentation with organosulfur compounds at the Institut organicheskoy khimii BashFAN SSSR (Institute of Organic Chemistry BashFAN SSSR). Trialkyl-replaced thiophanes were obtained from trialkyl-replaced tetrahydrofuranes produced by the method proposed by I. F. Bel'skiy and N. I. Shuykin (Izv. AN SSSR, 9, 1956, 1962). Furfural and aliphatic aldehydes and ketones served as the basic substances for the production of trialkyltetrahydrofuranes (yield of 70-90%) by a procedure which is described and illustrated. Tetrahydrofuran homologs were hydrobrominated at 100-120°C to produce thiophanes. Subsequent cyclization with sodium sulfide, and extraction produced new cyclic

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L 43008-65

ACCESSION NR: AT5008625

sulfides not previously described. These are shown in Table 1 on the Enclosure. In addition to these, 2,6-dimethylpentamethylenesulfide and 2-ethylpentamethylene-sulfide were also produced. Orig. art. has: 2 formulas and 1 table.

ASSOCIATION: Institut organicheskoy khimii, BashFAN SSSR (Institute of Organic Chemistry, Bashkirskiy Branch, AN SSSR)

SUBMITTED: 00

ENCL: 02

SUB CODE: OC

NO REF SOV: 002

OTHER: 000

Card 2/4

SHUYKIN, N.I.; VASILEVSKAYA, G.E.

Hydrogenation of 2-methyl-5-acetyl furan in a flow system under pressure on a skeletal Ni-Al catalyst. Izv. AN SSSR. Ser. khim. no.8:1533-1534 Ag '64. (MIRA 17:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

SHUYKIN, N.I.; PETROV, A.D.[deceased]; GLUKHOVTSEV, V.G.; BEL'SKIY, I.F.;  
SKOBTCOVA, G.Ye.

Synthesis of furanamines and their catalytic conversion to nitrogen-containing five-membered heterocycles. Izv.AN SSSR.Ser.khim. no.9:  
1682-1685 S '64. (MIRA 17:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; POZDNYAK, N.A.; DGBRYNINA, T.P.

Action of cation-exchange resin KU-2 on the primary alcohols of  
normal structure. Izv. AN SSSR. Ser. khim. no. 9:1705-1707 S '64.  
(MIRA 17:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

VIKTOROVA, Ye.A.; SHUYKIN, N.I.; KARAKHANOV, E.A.

Alkylation of p-cresol by 3-phenyl-1-propen-3-ol. Izv. AN SSSR  
Ser. khim. no.12:2216-2217 D '64 (MIRA 18:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

NEKRASOVA, V.A.; SHUYKIN, N.I.; SOKOLOVA, G.A.

Preparation of peptides. Izv. AN SSSR Ser. khim. no.12:2219-  
2220 D '64 (MIRA 18:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

SHUYKIN, N.I.; BEL'SKIY, I.F.; SHOSTAKOVSKIY, V.M.

Catalytic synthesis of  $\alpha$ -alkyl- $\gamma$ -ketoenanthic esters.  
Zhur. ob. khim. 34 no.7:2118-2120 Jl '64 (MIRA 17:8)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN  
SSSR.

BEL'SKIY, I.F.; SHUYKIN, N.I.; SHOSTAKOVSKIY, V.N.; AN, V.V.

Catalytic transformations of  $\beta$ -furylpropionic and  $\beta$ -furylacrylic acids during hydration in the vapor phase. Dokl. AN SSSR 156 no. 4:861-864 Je '64. (MIRA 17:6)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
2. Chen-korrespondent AN SSSR (for Shuykin).

GLUKHOVTSOV, V.G.; SHUYKIN, N.I.; ZAKHAROVA, S.V.; KADAKHANOV, R.A.;  
IBRAKHMIOV, I.

Synthesis of aldehydo alcohols and ketols of the furan series.  
Dokl. AN SSSR 156 no. 4:869-872 Je '64. (MIRA 17:6)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

SHUYKIN, N.I.; SHOSTAKOVSKIY, V.M.; BEL'SKIY, I.F.

Catalytic isomerization of  $\beta$ -tetrahydrofurylpropionic esters.  
Dokl. AN SSSR 156 no. 5:1137-1139 Je '64. (MIRA 17:6)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN  
SSSR. 2. Chlen-korrespondent AN SSSR (for Shuykin).

L 16399-65 EWT(m)/EPF(c)/EWP(j) PC-l/Pr-l/ RM  
ACCESSION NR: AP4046383 S/0020/64/158/003/0692/0693

AUTHOR: Shuykin, N. I. (Corresponding member AN SSSR); Lebedev, B. L.  
Nikol'skiy, V. G.

TITLE: Vinylation of cyclanes and cyclic ethers

SOURCE: AN SSSR. Doklady\*, v. 158, no. 3, 1964, 692-693

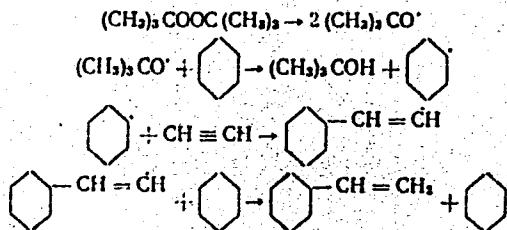
TOPIC TAGS: cyclane, cyclic ether, vinylation, radical mechanism, vinylcyclohexane, vinyldioxane, vinyltetrahydropyran, vinyltetrahydrofuran

ABSTRACT: The feasibility of adding cyclic compounds to the unsaturated bond of acetylene in the presence of peroxide was investigated. Reactions were run with cyclohexane, tetrahydrofuran, dioxane and tetrahydropyran in an autoclave at 150°C for 3 hours under 15 atm. acetylene using di-tert. butylperoxide as initiator. Gas-liquid chromatography, Raman and IR spectral analyses of the vinylation products established the formation of vinylcyclohexane, 2-vinyltetrahydrofuran, vinyldioxane and vinyltetrahydropyran. The following radical mechanism was indicated:

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L 16399-65  
ACCESSION NR: AP4046383

2



"We thank G. K. Gayvoronska for providing the Raman spectra." Orig. art.  
has: 1 table and 3 equations

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii  
nauk SSSR (Institute of Organic Chemistry Academy of Sciences SSSR)

SUBMITTED: 28 May 64

ENCL: 00

SUB CODE: GC

NO REF SOV: 003

OTHER: 001

Cord 2/2

SHUYKIN, N.I.; VASILEVSKAYA, G.K.

Tautomerism of tetrahydrofurfuryl bromide under conditions of  
Grignard synthesis. Dokl. AN SSSR 159 no.2:395-396 N '64.  
(MIRA 17:12)  
1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.  
2. Chlen-korrespondent AN SSSR (for Shyukin).

SHVYKIN, E.I.; VOLIMAK, N.A.; TROFIMOV, T.M.; LITVINOV, V.V.

Aromatic alkylation of tetralin. Report II: Alkylation of  
tetralin in the presence of titanium tetrachloride. Izv. AN  
SSSR Ser. khim. no.1:179-183 '65.

(MIRA 18:2)

U. Institut organicheskoy khimii im. M.L. Volinskogo AN SSSR.

YU. P. IZUMOV; CHEVKIN, N. S.; VYGAFOROV, G. M.

Synthesis of pyrroline homologs. Inv. AN SSSR Rep. Min. Nauk:  
Khimiya '65.

o. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

1. 600000, Moscow; 1970, 1971, 1972, 1973, 1974, 1975.

2. 1. Leningrad, Leningrad Oblast; 1970, 1971, 1972, 1973, 1974, 1975.  
2. 2. AM 32nd Regt. R-123-264, 1970.

(MIRA 18:2)

3. 1. Leningrad, Leningrad Oblast; 1970, 1971, 1972, 1973, 1974, 1975.  
2. 2. Leningrad, Leningrad Oblast; 1970, 1971, 1972, 1973, 1974, 1975.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

DR. K. L. Rhee; DAIRY COW, CALF; & AMERICAN,

Government of the People's Democratic Republic of Korea,  
Ansan, South Korea, 1987, 100% 18:27  
(Institute of Veterinary Research, Farmid von S. G. M. S. D. R.)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

SHUYKIN, N.I.; LEBEDEV, B.L.; NIKOL'SKIY, V.G.; GAYVORONSKAYA, G.K.

Vinylation of tetralin in the presence of peroxide. izv. AN SSSR  
Ser. khim. no.2:351-353 '65. (MIEA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

L 34906-65 EWT(m)/EPF(c)/EPR/EWP(j)/T PC-4/Pr-4/Ps-4 RPL RM/HW  
ACCESSION NR: AP5008110 S/0062/65/000/002/0353/0355

AUTHOR: Shuykin, N. I.; Pozdnyak, N. A.

TITLE: Catalytic synthesis of allylaromatic hydrocarbons

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1965,  
353-355

TOPIC TAGS: alkylation, alkenylaromatic hydrocarbon, allylbenzene,  
allyltoluene, allyltetralin

ABSTRACT: As allylbenzene, allyltoluene, and allyltetralin are potential starting materials for the synthesis of new types of rubber and other polymers, their synthesis is of considerable interest. In this work, benzene, toluene and tetralin were alkylated with allyl alcohol in the presence of zinc chloride. The choice of the appropriate solvent or, in some cases, the use of the reacting hydrocarbon as solvent was dictated mainly by the need to keep the reaction temperature above 110°C, since below that temperature no alkenylation takes place. Conventional Friedel-Crafts techniques were used. The best yields obtained were 50.0, 72.9, 60.0% (based on allyl alcohol) for allylbenzene,

32  
28  
B

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L-34906-65

4

ACCESSION NR: AP5008110

allyltoluene, and allyltetralin, respectively. Allyltetralin and  
allyltoluene copolymerize easily with butadiene to form elastomers. 15  
Orig. art. has: 1 equation, and 2 tables.

[VS]

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo  
Akademii nauk SSSR (Institute of Organic Chemistry, Academy of Sciences,  
SSSR)

SUBMITTED: 04Jun64

ENCL: 00

SUB CODE: OC, MT

NO REF SOV: 003

OTHER: 003

ATD PRESS: 3212

Card 2 / 2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

SHUYKIN, N.I.; LEBEDEV, B.L.; NIKOL'SKIY, V.G.

Vinylation of cyclic ketones. Izv. AN SSSR Ser. khim. no.2:396  
'65. (MIRA 12:2)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

ABGAFOROVA, G.Ye.; SHUYKIN, N.I.; BEL'SKIY, I.F.

Synthesis of trialkyl derivatives of pyrrole and pyrrolidine.  
Izv. AN SSSR. Ser. khim. no.4:734-736 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

TIMEFREYVA, A. S.; SHUYAIN, N. I.; PETRYAYEVA, G. G.; DUDUKIN, V. V.

Isolation of C<sub>6</sub> - C<sub>9</sub> alkenes from their mixtures with other hydrocarbons  
by the bromination method. Izv. AN SSSR, Ser. khim. no. 7:1260-1262 '65.  
(MIRA 18:7)

I. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

SHUKIN, N.L.; VASILEVSKAYA, G.S.; BULINSKAYA, L.F.

Hydrogenation of 2-methyl-3-methylfuran on a platinum carbonyl in a flow system under pressure. Izv. AN SSSR, Ser. khim. no.11 1969-2032 '65.  
(MIRA 18:11)

I. Institut organicheskoy khimii im. N.N. Baulinskogo AN SSSR.

TOPCHIYEV, Aleksandr Vasil'yevich, akademik [1907-1962]; KARGIN,  
V.A., akademik, otv. red.; SHTERN, V.Ya., doktor khim.  
nauk, otv. red.; SEMENOV, N.N., akademik, red.;  
ZHAVORONKOV, N.M., akademik, red.; NAMETKIN, N.S., red.;  
SHUYKIN, N.I., red.; LIKHTENSTEYN, Ye.S., kand. filolog.  
nauk, red.; KUZNETSOV, V.I., red.

[Selected works; nitration] Izbrannye trudy; nitrovanie.  
Moskva, Nauka, 1965. 427 p. (MIRA 18:7)

1. Chlen-korrespondent AN SSSR (for Nametkin, Shuykin).

TOPCHIYEV, Aleksandr Vasil'yevich, akademik[deceased]; KARGIN,  
V.A., akademik, pr.v. red.; SHTERN, V.Ya., doktor khim.  
nauk, ctv. red.; SEMENOV, N.N., akademik, red.;  
ZHAVORONKOV, N.M., akademik, red.; NAMETKIN, N.S., red.;  
SHUYKIN, N.I., red.; LIKHTENSHEYN, Ye.S., kand. filol.  
nauk, red.; KUZNETSOV, V.I., red.

[Selected works] Izbrannye trudy. Moskva, Nauka.[Book 1]  
1965. 427 p. (MIRA 18:8)

I. Oklen-korrespondent AN SSSR (for Nametkin, Shuykin).

BEL'SKIY, I.F.; SHUYKIN, N.I.; GRUSHKO, I.Ye.; SHOSTAKOVSKIY, V.M.

Interaction between esters of  $\beta$ -tetrahydrofurylpropionic acid  
and its  $\alpha$ -alkyl-substituted derivatives and phosphorus tribromide.  
Izv. AN SSSR. Ser. khim. no.9:1670-1671 '65. (MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

TIMOFYEVA, Ye.A.; SHUYKIN, N.I.; BALASHOV, I.A.; SMIRNOV, V.S.

Catalytic synthesis of neohexane. Izv. AN SSSR. Ser. khim.  
no.9:1699-1701 '65. (MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

SHUYKIN, N.I.; NARYSHKINA, T.L.; RASHCHUPKINA, Z.A.

Conditions for suppression of the coke-forming process on a  
chromia-alumina-potassium catalyst in the dehydrocyclization of  
piperylene to cyclopentadiene. Kin. i kat. 5 no.5:950-952  
(MIRA 17:12)  
S-O '64.

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

REPORT NO. 14, 1945, OF THE INSTITUTE

OF ORGANIC CHEMISTRY, KAZAN, TATAR ASSASSINATE  
SOCIETY FOR ANALYTICAL INFORMATION, USSR, SER. CHINA  
NO. 1282203-2202, 1945.  
(MIRS 1842)

To Institute organicheskoy khimii im. N. D. Zelinskogo AN SSSR.  
Submitted April 5, 1945.

SHUYSKIN, N.I.; ERIVANSKAYA, L.A.; KOROSTELEVA, G.S.; POLYAKOV, A.P.

Transformations of n-butylpyridines in the presence of  
alumina-chromia catalysts. Izv. AN SSSR. Ser. khim. no. 12:2216-  
2218 '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet. Submitted April  
20, 1965.

BELITSKY, I.P., KURBET, S.S., SHUYKIN, N.I.

Synthesis of 1,1-dioxane and 1,1-dioxene homologs. Dokl. AN

SSSR 265 no.1821-820 P 165.

(MRA 18:12)

Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

Chlen-korrespondent AN SSSR (for Shuykin).

POLYAKOV, A.P.; ERIVANSKAYA, I.A.; SHUYKIN, N.I.

Dehydration of n-propyl(2-naphthyl)carbinol. Neftekhimiia 5  
no.6:845-849 N-D '65. (MIRA 19:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,  
kafedra khimii nefti. Submitted March 30, 1965.

BEL'ISKIY, A.P.; KHAR'KOV, O.N.; SHUYKIN, N.I.

Synthesis of  $\beta$ -oxa-1,5-ketoolcohols and study of their tautomeric transformations. Dokl. AN SSSR 165 no.5:1071-1074 D 1956.  
(MTR 19:1)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
2. Chlen-korrespondent AN SSSR (for Shuykin).

TIMOFYEVA, Ye.A.; SHUYKIN, N.I.

Possibility of the catalytic synthesis of neohexene. Nefte-  
khimia 5 no.6:832-834 N-D '65. (MIRA 19:2)

I. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.  
Submitted Sept. 7, 1964.

NEKRASOVA, V.A.; SHUYKIN, N.I.

Catalytic methods of production of aliphatic and alicyclic  
amines. Usp.khim. 34 no.11:1945-1964 N '65.  
(MIRA 19:1)

I. Krymskiy sel'skokhozyaystvennyy institut i Institut organi-  
cheskoy khimii imeni N.D.Zelinskogo AN SSSR.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4

Chemical synthesis of 1,2-dimethyl-4,5-dihydrofuran.  
Synthesis and transformation of 2-methyl-4,5-dihydrofuran.  
Inventor: N.P. Zetinskaya  
Institute of organic chemistry im. N.D. Zelinskogo AN SSSR. Sub-  
mitted August 16, 1963.

(MIRA 19-11)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320010-4"

CHUPRIN, K. A.; KERZHNIKOV, D. S.; GOLIKHOV, M. V., ISRANOV, ...  
Dissociations of furyl- and tetrahydro-3-furylalkanols on  
positive carbon. Izv. AN SSSR. Ser. Khim. no. 1:182-184 '66.  
(MIRA 10:1)

G. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
Submitted June 2, 1965.

SHVYKIN, L.I., KHMEL'NIKOVA, N.I.

Synthesis and catalytic dehydrocyclization of 2- and  
3-n-butylbenanthrenes. Izv. AN SSSR. Ser. Khim. no.1:125-  
129 (1964) (MIRA 19:1)

I. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
Submitted August 5, 1963.

BUKLEY, J.R., HUNTER, S.M.; CHIKIN, N.S.

Synthesis of monofurfuryl and tetrahydro-furfuryl ethers of  
1,3-diyne-1,3-AN SSSR. Ser.khim. no.117-171-166.  
(MIRA 1961)

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TITLE: Conversion of n-hexane over alumina-chromia-potassia catalyst in a nuclear reactor

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ABSTRACT: A study was made of the behavior of alumina-chromia-potassia catalyst under the action of ionizing radiation. It was previously reported that in the dehydrogenation of methylcyclohexane to telene in the presence of alumina-chromia catalyst promoted with potassia and cerium oxide, preliminary irradiation of the catalyst increases its catalytic activity. In the present work, a catalyst was chosen having a composition of 90.7 mole percent alumina, 5.6 mole percent chromia, and 3.7 percent potassia. It was used in the conversion of N-Hexane. The catalyst samples were irradiated

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